

AFIP/ARP to exhibit in New Orleans

AFIP and the American Registry of Pathology (ARP) will take part in the 82nd Annual Meeting of the U.S. and Canadian Academy of Pathology, March 15-17, 1993, at the New Orleans Hilton. AFIP and ARP will be located in Booth 108 and will have information and representatives on hand to talk about the Institute and fascicles available for sale. ARP will have available for purchase the newly published *Tumors of the Thyroid* (\$58.00, Series III, Fascicle 5) and a new AFIP special publication, *Histopathology Atlas for the Sudden Infant Death Syndrome* (\$40.00).



Photo: PHC Kenil Porter
AFIP forensic anthropologist Paul Sledzik (R) observes remains from a lead coffin. For Story, see page 7.

US, Canadian pathologists respond to survey

AFIP is praised, challenged to improve

AFIP Director Vernon W. Armbrustmacher, Col, USAF, MC, responds to the recent AFIP/ARP survey results.

Over 1,800 U.S. and Canadian pathologists responded to the recent AFIP/American Registry of Pathology (ARP) survey by providing us with a comprehensive "report card" on our services in consultation, education, and research. Of these, approximately 25% took time to write out general comments, and at least half of the comments were favorable. Many of you noted improvements in areas such as consultation turnaround time, depth of staff expertise, and efforts to bring more AFIP courses to local areas.

Others challenged us to improve in many of these same areas. A number of their concerns are in areas which we are currently improving or have greatly improved recently. I'd like to outline and respond to some of the more prominent issues.

✓ **Faster turnaround time:**

We've made great progress in this area since the fee program began. We routinely send a FAX copy of the consultation report if a FAX number is available. The median turnaround time is still 72 hours, but cases in need of extra laboratory work may take longer. We are looking at ways to improve our internal courier service as cases move from one department to another. AFIP

and ARP are currently exploring funding a contract with Federal Express so that each case could be sent to the Institute overnight at no cost to the sender and with minimum inconvenience. This, combined with response by FAX, should reduce turnaround time considerably.

✓ **Improved communication from AFIP staff:** We recognize the value of personal communication. We no longer make collect telephone calls to contributors, and, in fact, we encourage our staff to call contributors directly on each and every case. We are also encouraging staff to respond with detailed opinions, especially in cases where a contributor poses a number of questions regarding the case.

✓ **A lack of senior staff reviewing cases:** We emphasize collaboration among all staff members. Cases are frequently looked at in a group setting, and the department chairperson most often reviews a diagnosis even if his or her signature does not appear on it. We are considering changing our policy so that the department chairperson cosigns each case he or she has received.

✓ **Updating fascicles and study slide sets:** We are pleased to inform some of our responders that a new series (Series III) of AFIP tumor fascicles is well on its way. Four fascicles in this third series have already appeared in the last two years, and seven more are in the editing or

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DIRECTOR'S MESSAGE

Clinical Laboratory Improvement Amendments (CLIA) update

Another major milestone was recently achieved in DoD's efforts to meet the requirements of the Clinical



Laboratory Improvement Amendments (CLIA). On 15 January 1993, a Memorandum of Agreement (MOA) was finalized

between DoD and the Department of Health and Human Services (DHHS). The MOA officially recognizes the unique mission requirements of the armed services in the areas of training, contingency, and wartime operations. I would like to highlight two key issues in the document.

First, DoD is required to establish a triservice regulation in fiscal year 1993 that will incorporate the CLIA regulations. A draft of the new regulation was defined at a triservice workshop at AFIP in July 1992. Although it will require some refinement following new technical corrections published in the *Federal Register* on 19 January 1993, the new regulation is expected to be implemented shortly.

Second, the Assistant Secretary of Defense for Health Affairs will be responsible for supervision and oversight of the military program. AFIP is expected to play a major role in supporting this responsibility through a new Office of Clinical Laboratory Affairs. Staffed by a senior laboratory consultant to each service Surgeon General, the office will provide CLIA program management, technical support, and quality assurance assistance. We are

TUMORS OF THE THYROID

ATLAS OF TUMOR PATHOLOGY: Third Series, Fascicle 5

by Juan Rosai, MD, Maria Luisa Carcangiu, MD,
and Ronald A. DeLellis, MD

Armed Forces Institute of Pathology, Washington, DC, 1992

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This latest AFIP atlas reflects the progress made since the last fascicle on these topics appeared.

The text begins with a concise summary of the embryology, anatomy, histology, and physiology of the thyroid. Then there are thorough discussions of the various forms of adenomas, carcinomas, sarcomas, and other tumors that occur in the thyroid. In addition, sections are devoted to the numerous tumorlike lesions that must be distinguished from neoplasms. Among these are hyperplasias, thyroiditis, dysmorphogenetic goiter, and radiation changes.

There are valuable correlations between routine histologic images and the results of immunohistochemistry, electron microscopy, and fine needle aspiration. Furthermore, there are graphic comparisons of the effects of different fixatives and frozen sections on the appearances of the tumors and illustrations of artifactual diffusion of tumor markers that can lead to pitfalls in diagnosis.

There are 343 pages, 43 color plates, and 303 black-and-white illustrations. The quality of the illustrations is outstanding. All who deal with thyroid lesions will find it indispensable.

Please see page 15 for fascicle order form.

striving to initiate this office by 1 March 1993.

These and many other related CLIA issues were recently presented at the annual meeting of the Society of the Armed Forces Medical Laboratory Scientists (SAFMLS) in Washington, DC. It was quite apparent at an open audience question and answer session that many challenges face DoD in implementing this law, not the least of which is a budget. Many conversations between laboratory leaders, however, raised expectations of eventual major cost savings to be derived. New approaches to high cost laboratory technician training, enhanced recruitment programs, standardization, and others were discussed. I'm very

confident that the DoD program will be a significant step towards a more cost-conscious and quality military laboratory system.

Vernon W. Armbrustmacher
Col, USAF, MC
The Director



New York City skyline overlooking lower Manhattan. Photo: NY Convention & Visitors Bureau



Albuquerque's Old Town Plaza. Photo: Albuquerque Convention & Visitors Bureau

Education Spotlight

New York City to host GI Pathology Review June 4-5; Forensic Anthropology moves to Albuquerque June 21-25

AFIP will offer two major courses on the road in June 1993, with the Gastrointestinal Pathology Review moving to New York City and Forensic Anthropology heading to Albuquerque, New Mexico. "The **Gastrointestinal Pathology Review**, to be held **4-5 June** at the **Cornell Medical Center**, is the first of what we hope will be many major courses offered by the AFIP in the New York City area," notes AFIP Deputy Director J. Thomas Stocker, COL, MC, USA. Accommodations will be provided by the **Westbury Hotel**.

Physicians, pathologists, and gastroenterologists will have the opportunity to benefit from a faculty that includes AFIP staff and noted guest lecturers, including **Heidi Rotterdam, MD, Harry Ioachim, MD, Ira Jacobsen, MD, Charles Lightdale, MD, and Jerome Wayne, MD**.

According to course director **Leslie H. Sobin, MD**, chief, Division of Gastrointestinal Pathology, Department of Hepatic and Gastrointestinal Pathology, the expansion of gastrointestinal fiberoptic endoscopy has strengthened the interaction between pathologists and gastroenterologists. "As a result, several major topics will be covered by pairs of pathologists and gastroenterologists," he

says. Included among them are gastrointestinal polyps, colitis, gastritis, and precancerous lesions in the flat mucosa. The program will also cover lymphomas of the gastrointestinal tract, carcinoids, pediatric gastrointestinal biopsies, and gastrointestinal AIDS pathology, among others.

Plans call for this course to be paired with Dr. Kamal Ishak and Dr. Zachary Goodman's hepatopathology course in 1994 and held in Vail, Colorado.

The **Sixth Annual Forensic Anthropology Course** will be held from **21-25 June** at the **University of New Mexico's Maxwell Museum of Anthropology in Albuquerque**. "We're excited to take a course that we've given a number of times here in Washington, DC, to the scenic and historic Southwest," says COL Stocker. According to course director **Paul S. Sledzik, MS**, curator of anatomical collections at the AFIP's National Museum of Health and Medicine, the course will feature a field exercise on techniques for locating and recovering human remains. "Our faculty changes every year to highlight new techniques and approaches to solving problems in the field," he says.

The course consists of a series of lectures followed by laboratory sessions which will emphasize hands-on analysis of skeletal remains. "We chose the University of New Mexico because of the strength of their skeletal collection and because their involvement with the New Mexico Office of the Medical Investigator serves as a model for the way states should work with forensic anthropologists," he points out.

Serving as directors for the course in addition to Sledzik are **Anthony B. Falsetti, PhD**, assistant professor, **Department of Anthropology, University of New Mexico**, and **J. Stanley Rhine, PhD**, curator, **Physical Anthropology, Maxwell Museum of Anthropology, University of New Mexico**. Included on the guest faculty are AFIP staff members and a number of board-certified forensic anthropologists, primarily from the western part of the United States.

Attendance is limited to 35 because of the skeletal material being used and the necessity for hands-on activity. **Reduced-rate lodging is available at the La Posada Hotel in Albuquerque, or for \$14.50 per night in dormitory rooms at the University of New Mexico**. Shuttle bus service is available.

AFIP hazardous waste recycling program saves tax dollars, improves environment

AFIP's commitment to a safe and healthy environment is being carried out through a new hazardous waste recycling program. The program, which recycles solvents (i.e., xylene, alcohol, acetone), has also led to significant cost savings for the Institute. "Hazardous waste recycling problems are not new," says program manager Belarmino Navarro, HMCS, USN. "Disposing of chemical solvent wastes from laboratories is a problem that has grown both in regulatory complexity and associated costs."

Xylenes and alcohols are used for a variety of laboratory tests, including staining and fixing of slides in histopathology laboratories. As costs for disposing of the wastes grew (primarily from government regulations), the Institute looked towards recycling. "It costs twice as much to dispose of a gallon of xylene as it does to purchase a new one, so recycling really makes sense," Navarro notes.

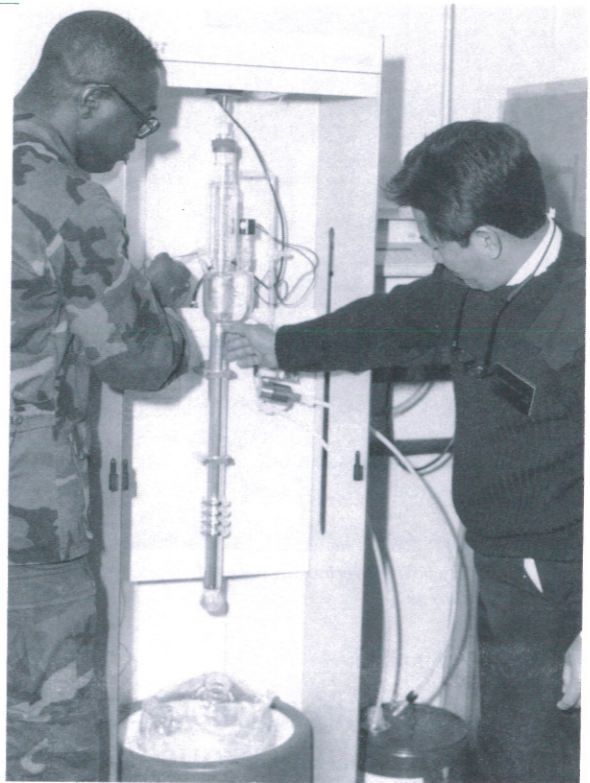
Plans got underway in the spring of 1992, as a number of methods were reviewed for cost effectiveness, operation risk, and ecological soundness. A few months later, two B/R Instrument stills were installed to begin a testing phase for reclaiming the xylene. "These stills are

capable of distilling complex liquid mixtures such as the xylene waste to a point that the end result is 99.9% pure xylene," says Navarro.

During the testing phase, Senior Chief Navarro collected all xylene wastes and then processed them in the stills. The recycled product was issued back to the generators (users) for quality control check and, simultaneously, samples were sent to Victor Kalasinsky, PhD, chief, Environmental Toxicology Division, Department of Environmental and Toxicologic Pathology, for purity testing. Personnel then tested the quality of the recycled product on their slides, which turned out to be as good as or better than the original xylene.

"Dr. Kalasinsky analyzed the end product for purity through gas chromatography and mass spectrometry, and the results showed 99.9% ethyl benzene and xylene, which is equivalent to commercially-available xylene," Navarro points out. The success of this pilot program led to the purchase of a third still, this time to recycle alcohols. The Institute now expects to cut its hazardous waste disposal by up to 80% of the amount generated.

Through recycling, AFIP saved



Army Spec. Scott Breatty (L) and Navy Senior Chief Belarmino Navarro work with one of the new recycling stills.

\$5,000 in the last quarter of 1992. While the distillation units should pay for themselves in less than two years, AFIP expects to save over \$35,000 annually in xylene purchase and disposal costs. "This is our way of maintaining a safe and healthy work environment while saving tax dollars," he says.

Histopathology Notes

Helpful Hint: This procedure is for the Brown & Brenn and Brown & Hopps gram-negative and gram-positive bacteria stain. These stains are located in the revised AFIP Laboratory Methods in Histopathology Manual, 1992, pages 221-224.

The Veterinary Laboratory performs 50 to 60 Brown & Brenn and Brown & Hopps gram-negative and gram-positive

stains a day. While performing these stains, they have found that modifying this procedure enhances the tintorial quality of the stain. This modification is accomplished as follows:

STANDARD PROCEDURES:

- Step 1. Deparaffinize and hydrate in distilled water.
- Step 2. Mordant slides in a 5% solution of sodium bicarbonate for 3 to 4 minutes.

- Step 3. Do not rinse slides
- Step 4. Place slides on staining rack and flood with crystal violet solution for 1 minute.
- Step 5. Proceed to step 3 in AFIP Histopathology Manual.

AFIP Associate Director looks to future Turnaround time, new projects dominate discussion

AFIP Associate Director Kenton S. Hartman, Col, USAF, DC, oversees the Center for Advanced Pathology's "Group A," which consists of ten departments primarily devoted to surgical pathology. In a recent interview, Col Hartman discussed a number of ongoing initiatives, including turnaround time, research projects, cross-training, and telepathology.

Q. Turnaround time is always a primary concern for contributors. What's happening in that area?

A. AFIP's goal is to compete with major consultation centers in surgical pathology around the country, and relatively speaking, we've done a decent job with that over the last two years. Group A handles 72% of the Institute's surgical pathology consults, and right now we're slightly beyond our goal of providing a diagnostic response in 72 hours on cases that do not require additional laboratory workup. Because AFIP tends to receive primarily the more difficult cases for a second opinion, extensive laboratory preparation is often required in order for us to provide the most accurate final report. This, of course, lengthens the case turnaround time, but every effort is made to assure diagnostic accuracy. We've also been impacted by a reduced personnel ceiling but are continuing to work on that issue.

Q. What about ongoing research projects in Group A?

A. We have ongoing research and scholarly activity occurring in each of the ten departments in Group A. During 1991, the Group A professional staff had 107 publications published in an array of scientific journals. The depth of experience among our surgical pathologists from dealing with large series of usual and unusual entities is outstanding. As a

component of the American Registry of Pathology, our departmental registries, such as the Uveal Melanoma registry in the Department of Ophthalmic Pathology, provide unique collections of a specific



Associate Director, Center for Advanced Pathology,
Kenton S. Hartman, Col, USAF, DC.

diagnostic entity from which research may be conducted within the AFIP or in collaboration with other institutions. We also have on hand several case collections such as the Ewing's Sarcoma collection, a large bone collection, testicular tumor collection, and several brain collections such as the Yakovlev Collection which are available for study and research. Among the Group A departments, each year our chairpersons and senior professional staff provide significant numbers of research publications based upon their experience with AFIP cases. These same individuals are also involved on a national and international scale providing seminars, and participating in a variety of courses and scientific programs. During 1992, significant studies were reported by gyn/

breast pathology, soft tissue pathology, dermatopathology, genitourinary pathology, hepatic and GI pathology, orthopedic pathology, hematopathology, ophthalmic pathology, neuropathology, and in forensic pathology. We are now engaged in some relatively new research areas for us, particularly in the arenas of forensic toxicology and DNA in reference to identification.

Q. Training opportunities are also important, especially for our junior staff members. Can you address some ongoing developments in this area?

A. Having our junior staff members who are assigned to a subspecialty area, but who are also well trained in general surgical pathology, is very important to us. We would like to provide cross-training opportunities because, in addition to providing depth of experience and succession as chairpersons and other experienced staff depart, this will also allow our military staff to keep up with some aspects of general surgical pathology prior to being reassigned to another medical facility. For example, we would hope to provide a junior staff member in Soft Tissue Pathology with the opportunity to train in Dermatopathology over a period of several months. The benefits would be significant to each of us.

Q. In 1992 DoD initiated a genetic identification program for service members, which was spearheaded by the AFIP. What's happening with it now?

A. Since the inception of the DNA Registry in June 1992, over 68,000 blood and bucca mucosa samples from incoming recruits have been collected at military reception stations, and now are collecting about 1,000 samples per day. When all of the military collection centers become fully operational, that number will climb to over 3,000 specimens per day. Collection priorities are being established for the residual active-duty forces, and we expect to complete this large segment over a five-year period.

The repository is currently housed in

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Wayne M. Meyers, MD, PhD

A leader in the fight against leprosy

AFIP's Wayne Meyers, MD, PhD, Mycobacteriology Branch chief, Department of Infectious and Parasitic Disease Pathology, and registrar for Leprosy, has spent a lifetime studying the disease and working to lessen its impact on humanity. "We've come a long way on the medical side, but the stigma of the disease remains," he says. The World Health Organization (WHO) estimates that there are 5 to 10 million leprosy patients in the world, with approximately 600,000 new patients annually. Highest prevalences are in India, tropical Africa, and South America. In the U.S. there are approximately 6,000 known leprosy patients and about 150 new patients each year. Most patients come from other countries, but leprosy is endemic in Louisiana, Texas, and Hawaii. Some of the patients in Louisiana and Texas most likely acquired leprosy from naturally-infected armadillos. "Any patient today can be cured, but there is really no rationale for the stigma that still exists," says Meyers. Today, leprosy is treated by a combination of effective drugs, and the WHO believes the disease can be eliminated as a public health problem by the year 2000 (1 patient/10,000 population).

Dr. Meyers began his medical career in 1961 as a missionary physician with the American Leprosy Mission in Africa, where he served for 13 years in Urundi (now Burundi) and the Democratic Republic of Congo (now Zaire). His collaboration with AFIP staff during his stay in Africa resulted in many scientific publications. "I first visited the Institute on my way to Africa when I met with Dr. Chapman Binford, who founded this department as the Infectious Disease Branch, in 1951, and was then serving as head of the Geographic Pathology Division," he notes. Later, Meyers worked with Binford's successor, Dr. Daniel Connor.

"Together we studied *Mycobacterium ulcerans* infections and other diseases of the tropics, especially filarial infections."

In Urundi, Meyers first ran a one-doctor hospital with adjacent leprosarium, which was the only medical facility within many miles. His next assignment took him to eastern Zaire, where he was responsible for over 2,000 leprosy patients in a mission hospital. The 1964 rebellion forced him to move with his family to



western Zaire, where he continued his work until 1973.

Meyers has always had a strong interest in leprosy research. In Africa, where laboratory equipment was scarce, he made, for example, his own constant-temperature water baths using two-gallon oil cans with a circulating heater of copper tubing, and an alcohol lamp. "We did publishable research using such home-made basic equipment," he points out. In 1968, between tours of duty in Africa, he studied with Dr. Binford as an NIH/

Leonard Wood Memorial Fellow in Research Pathology of Leprosy at the AFIP.

Since coming to the AFIP in 1975, his research interests have included experimental leprosy in animal models, particularly armadillos, and nonhuman primates. He currently collaborates as a Research Affiliate at the Tulane University Regional Primate Research Center studying the mangabey monkey and other primates as animal models of the disease. "We now have trials going on anti-leprosy vaccines," he notes. He has also conducted research on the histopathology of leprosy, including a large multicentered chemotherapeutic trial in Africa, Pakistan, and India. Another study on Vietnam veterans should be completed shortly. He has a major interest in natural nonhuman sources of leprosy (e.g., monkeys and chimpanzees), and is developing joint studies with African scientists on this question in West Africa.

The Leprosy Registry now contains over 20,000 individual cases, with most of the 200 to 300 new cases arriving each year from Africa. Meyers sees this decline in numbers as an encouraging sign. "This is down from an average of over 2,000 annual cases in the 1970's," he says, "and this really reflects the progress that has been made in the treatment and management of the disease."

Meyers is grateful that the AFIP doesn't levy user fees on underdeveloped nations for accepting cases, since their pathology services are often meager or unavailable. "This service benefits the medically neglected patients of these regions, provides valuable teaching and archival material for the AFIP, and enhances the visibility of the Institute in international medicine," he says.

Meyers, who won the 1990 Damien-Dutton Award for outstanding service to the cause of leprosy, will complete a five-year term as President of the International Leprosy Association (ILA) in September on the occasion of the 14th International Leprosy Congress in Orlando.

PROJECT LEAD COFFINS

AFIP staff hopes to identify 300-year-old remains

A team of AFIP forensic experts recently took part in the unearthing of three rare lead coffins found in historic St. Mary's City, Maryland. The 300-year-old coffins, which were buried in the foundation of one of the earliest Catholic churches in North America, were discovered in 1990 by archaeologists using ground-penetrating radar. Expensive when made in the 1600's, the coffins assumed a prominent resting place in the chapel, leading experts to believe that they may belong to members of Maryland's founding Calvert family.

Team members hoped to find intact remains inside the coffins, since lead acts as a barrier to decomposition. Others involved included experts in wood, pollen, fiber, physics, and nuclear technology. They hoped to discover clues that could help determine more about life in 17th century America.

AFIP became involved in 1991 when a scientific panel convened to discuss how to proceed with the project. Richard C. Froede, MD, the former armed forces medical examiner, and Paul S. Sledzik, curator of anatomical collections at the AFIP's National Museum of Health and Medicine, were early participants. They worked with the other panel members to devise a plan for excavating the coffins and identifying the remains.

"This was truly an interdisciplinary effort," says Sledzik. "The AFIP got involved because, in addition to our expertise in skeletal identification, we could perform DNA testing, diagnose diseases from that time period, and conduct antibody research in preserved soft tissue." Other participants studied the air inside the coffins to see if it had been preserved for three centuries, attempted to look inside the lead lining through the use of nuclear imaging technology, or studied changes in the lead itself. "We all learned from one another," he says.

During the week of November 8,

1992, a number of AFIP staff joined Froede and Sledzik to assist in the project. Included were medical examiner and AFIP Deputy Director Glenn Wagner, CAPT, MC, USN; forensic anthropologist and AFIP distinguished scientist William Rodriguez, PhD; Museum forensic anthropologist Allison Webb Willcox; Ellen Andersen, LT, MSC, USNR, Department of Infectious and Parasitic Disease Pathology; and photographer PHC Kent Potter, USN.



Forensic anthropologists Allison Webb Willcox (L) and William Rodriguez, PhD, clean bone fragments in order to collect samples for future analysis. Photo credit: PHC Kent Potter.

A variety of tests, including imaging and the use of a fiberoptic boroscope, showed that the smallest of the three coffins did not have an airtight seal and contained no preserved material. "We basically used this one as a teaching tool before opening the two larger coffins," says Sledzik. AFIP staff have initially identified the remains as those of a 5- to 6-month-old infant, possibly a female, with lesions on the skull which indicate a nutritional deficiency such as rickets.

The second coffin to be opened was medium in size and contained the skeletal remains of a middle-aged female with a healed fracture of her lower right femur. "She most certainly walked with a limp," says Sledzik, "and she also had an osteomyelitic abscess on the side of her leg as a result of the fracture. It wasn't properly set and became infected." Recovered fabric samples included ribbons which are being analyzed by fabric experts. The age of the pine coffin found inside the lead liner will be determined using tree-ring analysis.

High expectations for finding well-preserved tissue in the third coffin were dashed after a weak spot in its lead liner was discovered. Inside were the remains of a 50- to 60-year-old male, approxi-

mately 5'5" in height. Sledzik said that a large amount of hair in the shape of a wig was found and is now being analyzed by the Smithsonian Institute. "There was no sign of arthritis evident in the bones and no cause of death immediately determined. The body was partially decomposed from the waist up, after a white crystalline material got into the bones, expanded, and disintegrated them."

AFIP efforts will now turn towards

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Richard K. Harris, LtCol, USAF, BSC appointed Chairman, Department of Veterinary Pathology

Richard K. Harris, LtCol, USAF, BSC, was appointed chairman of the Department



of Veterinary Pathology, effective 24 December 1992. In his new role Dr. Harris will direct the Institute's veterinary and comparative pathology activities and the

laboratory animal facility.

A native of Texas, Dr. Harris was raised in a military family. He received his bachelors degree and Doctorate of Veterinary Medicine from Texas A&M University, College Station, Texas. His early career assignments as an Air Force

veterinary officer were Clark AFB, Republic of the Philippines, and Lowry AFB, Colorado. Following completion of a three-year residency in veterinary pathology at the AFIP in 1983, he was assigned to the USAF School of Aerospace Medicine, Brooks AFB, Texas, where he served as chief, Anatomic Pathology Branch, Veterinary Sciences Division until 1987.

In 1987, he returned to the AFIP and became chief, Division of Veterinary Pathology. During his five years in this position, the division provided the pathology support to the Federal Government's evaluation of the effects of the *Exxon Valdez* oil spill, served as consultant to the Office of the Armed Forces Medical Examiner during operations Desert Shield and Storm, and conducted research directed at evaluation

of the effects of crude oil fires on animals in Kuwait.

Dr. Harris is a diplomate of the American College of Veterinary Pathologists and is a member of a number of veterinary medical societies and associations. He has authored or coauthored 20 scientific articles and abstracts. He is a graduate of Squadron Officers School, Air Command and Staff College, and Air War College. His military decorations include the Air Force Commendation Medal, the Joint Service Commendation Medal, the Air Force Meritorious Service Medal with OLC, and the Defense Meritorious Service Medal. He is the primary military consultant for veterinary pathology to the USAF Surgeon General. In 1991, Dr. Harris served as proctor for the American College of Veterinary Pathologists' board certification examination. He and his wife Bonnie have three sons, Bryan, Richard, and William.

AFIP Honors Enrique Mendez, Jr, MD Fellowship established in his honor



AFIP Director Vernon W. Armbrustmacher, Col, USAF, MC (L), presents Dr. Mendez with a plaque announcing the Mendez Fellowship.

Enrique Mendez, Jr, MD, who served as Assistant Secretary of Defense for Health Affairs and chairman of the AFIP's Board of Governors from 5 March 1990 to 20 January 1993, was honored by the Institute at a special ceremony on 7 January 1993. Dr. Mendez has supported numerous AFIP initiatives since his March 1990 appointment, including the establishment of the DNA Registry and the expansion of the Department of Environmental and Toxicologic Pathology. In his honor the AFIP and American Registry of Pathology have created the "Enrique Mendez, Jr., MD, Clinical Fellowship in Internal Medicine," which will train internal medicine practitioners in various aspects of anatomic pathology.

As Assistant Secretary of Defense for Health Affairs, Dr. Mendez has been responsible for the overall supervision of the health and medical affairs of the Department of Defense, ensuring at all times that the nation has a healthy fighting

force supported by a combat-ready health care system. His office oversees medical readiness and health care delivery responsibilities to over 9 million DoD beneficiaries through a \$14 billion health care system, including a worldwide network of 168 hospitals.

A native of Puerto Rico, Dr. Mendez graduated from the University of Puerto Rico and Loyola University School of Medicine. He entered the Army in 1955 and completed his residency in internal medicine in 1960. He served in the U.S. Army Medical Corps for 28 years, retiring in the permanent rank of major general in 1983. His military career highlights included positions as Deputy Surgeon General of the Army and Commanding General of Walter Reed Army Medical Center.

Prior to his current appointment, he served as Secretary of Health of the Commonwealth of Puerto Rico. Dr. Mendez and his wife, Olga, have four children and six grandchildren.

AFIP STAFF "IN THE NEWS"



■ **Florabel G. Mullick, MD, SES**, AFIP Associate Director (above, left), and **Simon Vinals Perez, MD**, Deputy Mayor for Health, Madrid, Spain, discuss health issues of mutual interest at a reception during the XIX International Congress of the International Academy of Pathology in Madrid, Spain.

■ In October, **James S. Nelson, COL, MC, USA**, chairman, Department of Neuropathology, attended the XIX International Congress of the International Academy of Pathology in Madrid, Spain, and presented a paper on the neuropathology of abetalipoproteinemia and its relation to avitaminosis E and age. In December, COL Nelson served as a member of the Oncodiagnosis Panel on Base of Skull Tumors presented at the annual meeting of the Radiological Society of North America. Approximately 2,500 physicians attended the panel, which consisted of four experts in surgery, radiology, oncology, and pathology.

■ **Jeanne M. Meis, MD**, chair, Department of Soft Tissue Pathology, attended the XIX International Congress of the International Academy of Pathology in Madrid, Spain, in October 1992. Dr. Meis presented a paper on 40 cases of clear cell sarcoma in children and adolescents and was invited to chair one

of two bone and soft tissue platform sessions in which papers were presented.

■ Dr. Meis was also guest of honor at the Soft Tissue Symposium of the American Society of Dermatopathology Meeting in San Francisco in December 1992. She lectured on recently described soft tissue tumors and discussed several soft tissue unknown cases.

■ In December 1992, **Victor W. Weedn, LTC, MC, USA**, chief, Armed Forces DNA Identification Laboratory (AFDIL), and **Mitchell Holland, PhD**, head of research for AFDIL, presented a paper on "DNA Testing in Urine" at a meeting sponsored by the U.S. Department of Transportation in Washington, DC. In attendance were toxicologists from the Department of Health and Human Services' certified drug-testing laboratories.

■ **Leslie H. Sobin, MD**, chief, Division of Gastrointestinal Pathology, Department of Hepatic and Gastrointestinal Pathology, and Associate Director of the Center for Scientific Publications, has received a four-year membership extension on the World Health Organization's Expert Advisory Panel on Cancer.

■ **Wayne M. Meyers, MD, PhD**, Mycobacteriology Branch chief, Division of Microbiology, and **Aileen M. Marty, LCDR, MC, USNR**, chief, Infectious Disease Pathology Branch, Department of Infectious and Parasitic Disease Pathology, recently went to Ghana to determine the ideal West African country in which to study the prevalence of leprosy and simian immunodeficiency virus (SIV) in nonhuman primates. Dr. Meyers, who is president of the International Leprosy Association, was then invited by the China Ministry of Public Health to consider Beijing as the site for the 15th International Leprosy Congress in 1998. Dr. Marty later attended the IAP Congress in Madrid, Spain, where she presented a paper on the histopathologic, immunohistologic, and electron-microscopic findings in a patient with confirmed Ehrlichiosis.

■ **Kamal G. Ishak, MD, PhD**, chair, Department of Hepatic and Gastrointestinal Pathology, presented a state-of-the-art lecture on benign tumors of the liver at the XXVIII World Congress of the International College of Surgeons, held in Cairo, Egypt, from 16-21 November. Dr. Ishak also gave a lecture on malignant liver tumors at the liver surgery section.

Sphinx and great pyramid of Cheops, Cairo, Egypt. Photo courtesy of Dr. Kamal G. Ishak.



Repository and Research Services Update

We have recently seen an increase in the number of cases submitted without an AFIP Form 288-R, Military and Civilian Contributors' Consultation Request. This form contains all the necessary information required to fulfill case submission requirements. When this form is not received, case processing is often delayed since our Receiving and Accessions Division must try and contact contributors to obtain any missing required information. Civilian contributors may obtain copies of this form by contacting the American Registry of Pathology, 14th Street and Alaska Avenue, N.W., Building 54, Washington, D.C. 20306-6000. Military members may obtain copies of this form by contacting the Center for Advanced Pathology here at the AFIP. Once received, these forms may be copied for future use. The most recent revision of AFIP Manual 40-40, Contributors' Manual, is still available for distribution to interested contributors. These can be obtained by writing or calling the Research Office at (202) 576-2884.

HARTMAN, continued from page 5

available warehouse space and this spring will be moved to a larger facility with optimum storage space and security. We've also added 8 military members to the repository staff. The Armed Forces DNA Identification Laboratory, also within the Office of the Armed Forces Medical Examiner, is at the forefront of developing new methods for the utilization of mitochondrial DNA and capillary electrophoresis for human remains identification. AFDIL is also involved in identifying several Vietnam-era MIA bones with the Army's Central Identification Lab in Hawaii (CILHI) and has worked with MIA families for possible DNA testing of as yet unidentified bone remains.

Q. What's the latest on telepathology?

A. We've initiated a small pilot study utilizing an Army, Air Force and Navy facility for the transmission of static microscopic images over ordinary telephone lines. We now have a small technical staff to assist in the collection of microscopic images from military contributors, and we have met with several commercial vendors for equipment.

We believe we've found a potential

equipment source which provides the excellent resolution pathologists require in the magnitude of 2,000 x 3,000 pixels. This is in a price range of less than \$25,000, which makes it economically feasible to purchase for facilities that could benefit from telepathology. Future plans include continuing the pilot study, determining the feasibility of a transmitted image as a means of performing diagnostic pathology, and, of course, publishing the results in an appropriate scientific journal. ☛

Environmental Disaster Symposium – 19-20 April

"Comparative Pathobiology of Environmental Disasters," will be held 19-20 April 1993 at the Holiday Inn Crowne Plaza, Rockville MD. The symposium will focus on the multidisciplinary approach necessary for investigating natural and man-made disasters, with case studies including the *Exxon Valdez* oil spill, the Kuwait oil fires, and the Bhopal chemical spill.

For further information, contact the Center for Advanced Medical Education at (301) 427-5231 or AV 291-5231.

AFIP to host telepathology seminar 15-16 May

AFIP will host a "Telemedicine Seminar and Workshop" on 15-16 May at the Holiday Inn Crowne Plaza, Rockville, MD. The purpose of this seminar is to gather medical and computer experts from the United States and Europe to share their experience in a didactic format.

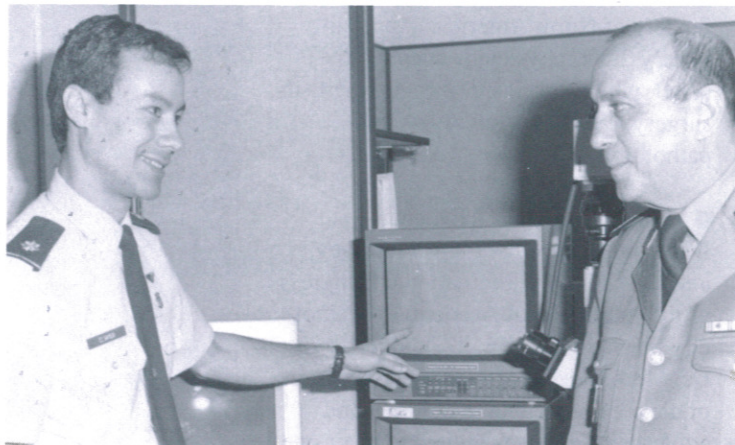
In addition to AFIP experts, guest faculty from the United States will include representatives from the Biomedical Visualization Laboratory at the University of Illinois, the Applied Physics Laboratory at Johns Hopkins University, the Mayo Clinic, and the University of Arizona. International faculty from Sweden, Germany, the United Kingdom, and Switzerland will also be on hand. The workshop component will provide a

hands-on opportunity to test and use different telemedicine and telepathology systems currently available. An informal

meeting of the International Academy of Telemedicine will be held in conjunction with the course.

For more information contact the AFIP's Center for Advanced Medical Education at (301) 427-5231.

Telepathology professional director Al M. Elsayed, Maj, USAF, MC (L), explains program to Colonel-Major Hamadi Belkheria, Commander of Habib Thameur Military Hospital, Tunis, Tunisia, during his 26 January visit to the AFIP.



SURVEY, continued from page 1

press stage. The remainder have been assigned to authors. I'm pleased to report that their cost is still well below comparable volumes and production time has been greatly reduced due to new electronic procedures.

The American Registry of Pathology (ARP) has instituted a subscribers program through which members automatically receive a new publication at a discount. ARP also sends over 17,000 announcements of new fascicles quarterly. ARP has available 35-mm transparencies which are excellent for teaching purposes. For more information, readers should contact Jonathan Johnstone, director of Marketing and Publications, at (301) 427-6628.

We regret that our glass slide study sets have not been updated. This is an important program, but we do not have sufficient resources to maintain it. Any suggestions or comments regarding this would be appreciated. Send your

correspondence in care of AFIP-PA, Washington, DC, 20306-6000.

✓ **Taking courses to other regions of the country:** Our Center for Advanced Medical Education (CAME) has done an excellent job in this area. We are taking at least 8 of our courses around the country in 1993, offering programs in cities such as New Orleans, Orlando, San Diego, New York City, San Antonio, Denver, Albuquerque, and San Juan, PR. We encourage you to call CAME at (301) 427-5231 to obtain a catalog for our 1993 course offerings, or see pages 3 and 13 of this LETTER for additional information.

✓ **Having the AFIP serve civilian medicine in a quality assurance role:** We currently support QA programs for all three military services and the VA in histopathology peer review, legal medicine, drug testing, and laboratory accreditation and proficiency testing. In addition, we interface with civilians by serving as a QA monitor for some civilian contracts with DoD agencies. We would be

interested in feedback from civilian institutions that are looking for QA support within laboratory medicine.

Your feedback has been extremely important to us. Copies of your comments have been forwarded to our chairpersons and other department heads to begin a course of action in response. We'll be sitting down shortly to sort out issues and put focus groups together to discuss such topics as turnaround time, the quality of our reports, what constitutes a "good" letter, and the need for "the personal touch" from our staff. Our goal is to serve you as effectively as possible.

Your comments on our services are always welcome. Please write us in care of AFIP, ATTN-AFIP-PA, Washington, DC, 20306-6000.

■ **Correction:** The Department of Radiologic Pathology's **Paula Keslar, MD**, and **Wendelin S. Hayes, DO**, were misidentified in the December AFIP Letter. **Dr. Keslar** is a pediatric radiologist who recently served on the faculty at the University of Florida. She will be in charge of AFIP's new section of Pediatric Radiology and will have a joint appointment in the Department of Pediatric Pathology. **Dr. Hayes** is an

abdominal radiologist who recently served on the faculty of Georgetown University Hospital and the National Institutes of Health. **Dr. Hayes** takes over the Genitourinary Radiology section and will initially concentrate on gynecologic and male genital diseases. **Drs. Keslar** and **Hayes** are also developing lectures to expand the curriculum offered to residents attending the department's six-week courses.



Paula Keslar, MD



Wendelin S. Hayes, DO

LEAD COFFINS, from page 7.

positively identifying the remains. The bones themselves will tell a great deal about diet, disease, and age estimation. "We want to find out who these people were, how they lived and died, their nutrition and stature in colonial Maryland," he notes. "DNA testing will indicate if the bodies are related to one another. We're hoping to find living relatives who have a matrilineal descent to the Calvert family. If the remains belong to a mother, father, and child, we can look back in historical records as a means of identification."

AFIP staff might also conduct antibody testing for diseases such as malaria, dysentery, and typhus, which were common to the area at that time. "We're also looking at insects found in the coffin to determine the season of death, since certain flies attracted to decomposing bodies aren't present in the winter." After the study is completed sometime in the next year, all remains will be reinterred at the chapel site with the blessings of the Roman Catholic Church.

Serum gastrin is not higher in subjects with colonic neoplasia

James Walter Kikendall, MD, FACG, Allan R. Glass, MD, Leslie H. Sobin, MD, and Phyllis E. Bowen, RD, PhD

Two previous studies have shown higher circulating gastrin levels in subjects with colonic neoplasia than in colonoscopy-negative controls. In this much larger study, sera were collected from fasting subjects undergoing colonoscopy. Colonoscopy with biopsy classified participants as having colonic adenomas (N = 139), colon carcinomas (N = 29), or controls without colonic neoplasia (N = 150). Frozen, stored sera were later analyzed for gastrin by radioimmunoassay. Serum gastrin values were no higher in subjects with colonic adenomas or carcinoma than in colonoscopy-negative controls. We conclude that elevated serum gastrin levels play little, if any, role in the initiation of colonic neoplasia.

The American Journal of Gastroenterology. 1992;87:1394-1397.

Evaluation of six commercial amphetamine and methamphetamine immunoassays for cross-reactivity to phenylpropanolamine and ephedrine in urine

Jeffrey D'Nicuola, Robert Jones, Barry Levine, and Michael L. Smith

We evaluated six commercially available amphetamine (A) and methamphetamine (MA) immunoassays for their relative cross-reactivities to isomers of phenylpropanolamine (PPA) and ephedrine (E) in urine: Syva EMIT, Abbott fluorescence polarization (FPIA), Roche, and Diagnostic Products Corporation (DPC) radioimmunoassays for A and MA. Two stereoisomers of PPA and four stereoisomers of E were tested using (1) drug-free urine spiked at 1000 mg/L or 100 mg/L of each compound and (2) 60 clinical urine specimens not containing A or MA but having varying amounts of PPA and/or E. Specimens responding greater than the 1-mg/L A or MA cutoff were defined as positive. All specimens spiked at 100 mg/L were negative by all immunoassays. All specimens spiked at 1000 mg/L were positive by EMIT and negative by FPIA, Roche A, and DPC A; 1000 mg/L *-E* and *d*-pseudo-ephedrine were also positive by Roche MA and DPC MA. Three of the 60 clinical specimens tested positive by EMIT and one specimen tested positive by DPC A and DPC MA.

Journal of Analytical Toxicology. 1992;16:211-213.

Gas chromatographic-mass spectrometric methods of analysis for detection of 11-nor- Δ^9 -tetrahydrocannabinol-9-carboxylic acid in biological matrices.

William E. Bronner and Allan S. Xu

Gas chromatographic-mass spectrometric methods of analysis for the detection of 11-nor- Δ^9 -tetrahydrocannabinol-9-carboxylic acid, a major metabolite of Δ^9 -tetrahydrocannabinol, are reviewed. Emphasis is on analytical methodology including numerous derivatization techniques developed specifically for this analyte. The majority of procedures cited in the literature were developed to detect this metabolite in the blood and urine of man.

Journal of Chromatography, 1992;580:63-75.

Elastofibroma: MR and CT appearance with radiologic-pathologic correlation

Mark J. Kransdorf, Jeanne M. Meis, and Elizabeth Montgomery

OBJECTIVE: The purpose of our study was to determine the MR and CT appearances of elastofibroma and correlate the imaging features with the underlying pathologic findings.

MATERIALS AND METHODS: We reviewed retrospectively the MR and CT findings in five cases of elastofibroma. All patients had a soft-tissue mass; one patient also complained of pain. The mean age of the patients was 71 years (range, 63-79 years). Four lesions occurred in the subscapular region, and one occurred in the thigh. In addition, we reviewed and compared the demographic data of 72 histologically proved cases for which we had archival data.

RESULTS: Three of four lesions evaluated with spin-echo MR imaging were approximately isointense with skeletal muscle and contained areas with a signal intensity similar to that of fat; these corresponded to areas of dense collagen and interspersed fat, respectively. In the fourth case, the MR appearance was nonspecific. In one case, MR imaging with gadopentetate dimeglumine showed areas with and without enhancement. Three of four lesions evaluated with CT had variable margins, with tissue attenuation similar to that of the adjacent soft tissue as well as scattered areas of decreased attenuation, suggesting fat within the lesion. In one case, the lesion was well defined and relatively homogeneous with an attenuation less than that of skeletal muscle.

CONCLUSION: The MR and CT features of elastofibroma are different from those of most other soft-tissue tumors, reflecting entrapped fat within a predominantly fibrous mass. Although these features are not pathognomonic, their presence in a subscapular lesion in an older patient suggests a presumptive diagnosis of elastofibroma.

AJR. 1992;159:575-579.

Postgraduate Short Courses in Continuing Education Academic Year 1993

Course Title	Scheduled Dates	Location
Forensic Dentistry	15-19 March 93	Sheraton Premiere, Tysons Corner, Vienna, VA
Uroradiology Weekend	3-4 April 93	Hyatt Regency Capitol Hill, Washington, DC
Hepatopathology -93	15-17 April 93	U.S. Grant Hotel, San Diego, CA
Comparative Pathobiology of Environmental Disasters	19-20 April 93	Holiday Inn Crowne Plaza, Rockville, MD
Perinatal & Pediatric Pathology	19-23 April 93	Holiday Inn, Bethesda, MD
Problems in Anatomic Pathology	25 April-7 May 93	AFIP, Washington, DC
Otolaryngology: Head & Neck	26 Apr-21 May 93	AFIP, Washington, DC
Gastrointestinal Radiology Review	1-2 May 93	Menger Hotel, San Antonio, TX
DNA Databanks & Repositories	14-15 May 93	Holiday Inn Crowne Plaza, Rockville, MD
Telemedicine Seminar	15-16 May 93	Holiday Inn Crowne Plaza, Rockville, MD
Descriptive Veterinary Pathology	1-4 June 93	AFIP, Washington, DC
Gastrointestinal Pathology Review	4-5 June 93	Cornell Medical Center, New York, NY
Exfoliative & Fine Needle Aspiration Cytology	7-11 June 93	Washington Marriott, Washington, DC
Forensic Anthropology	21-25 June 93	University of New Mexico, Albuquerque, NM
Pathology of Infectious Diseases & AIDS	12-16 July 93	Condado Plaza Hotel & Casino, San Juan, Puerto Rico
Histopathology Techniques	3-7 August 93	AFIP, Washington, DC
Pathology of Laboratory Animals	9-13 August 93	Hyatt Regency, Bethesda, MD
Anatomy, Histology, & Microscopy of the Eye	28-29 August 93	Georgetown University Conference Center Washington, DC
Ophthalmic Pathology for Ophthalmologists	30 Aug-3 September 93	Georgetown University Conference Center Washington, DC
Hepatic Pathology	8-10 September 93	Holiday Inn, Bethesda, MD
Pathology of Congenital Heart Disease	13-17 September 93	AFIP, Washington, DC
Pulmonary & Mediastinal Radiology	18-19 October 93	Washington Marriott, Washington, DC
Future Technologies for DNA Analysis	4-5 October 93	Holiday Inn Crowne Plaza, Rockville, MD
Morphologic Findings in Renal Disease	4-7 October 93	AFIP/Calender Lab, Washington, DC
Ancient Human DNA	11-12 October 93	Old Town Holiday Inn, Alexandria, VA
3rd Annual Radiologic Pathologic Correlation	11-15 October 93	Colonial Williamsburg, Williamsburg, VA
Essentials of Forensics	11-15 October 93	Holiday Inn Crowne Plaza, Rockville, MD
Respiratory Tract & Mediastinum	6-8 November 93	Tucson National Resort, Tucson, AZ
Gynecologic Pathology	7-9 November 93	Holiday Inn, Bethesda, MD
Oral Pathology Review	15-17 December 93	Hilton Palacio del Rio, San Antonio, TX

Forensic Dentistry

Presented by specialists in the fields of forensic dentistry, criminal investigation, and law, this five-day course will consist of lectures, panel discussion, illustrative situations, and student participation in a laboratory exercise involving the identification of human remains by dental means. This comprehensive course is the oldest and most complete course provided in forensic dentistry. It is intended for all categories of dentists, dental students, forensic scientists, medical examiners, FBI and law enforcement officials, and other identification personnel.

Uroradiology

Designed for the practicing radiologist, the curriculum has a two-fold purpose: to discuss new and/or controversial areas of uroradiology as they apply to every day practice, and to review basic principles of radiologic-pathologic correlation in selected areas. Each half-day session will include a display and discussion of unknown cases selected to illustrate contemporary concepts. The course objective is to assess new developments in uroradiology and to refresh basic principles of radiologic-pathologic correlation in selected areas.

Hepatopathology: A review and update course

This course provides a comprehensive review and update of the methodology of hepatic histopathology, and the pathologic aspects with clinical correlations of the most important diseases affecting the liver. These include neonatal cholestasis, the chronic cholestatic disorders (primary biliary cirrhosis, primary sclerosing cholangitis and others), acute necroinflammatory diseases (e.g., those due to viral hepatitis B, D, or C, autoimmune chronic hepatitis and others), the morphologic spectrum of alcoholic liver disease and its differential diagnosis, drug-induced liver injury, vascular diseases, fibrocystic diseases, metabolic diseases and benign and malignant tumors in children

and adults. Twelve interesting cases, selected to supplement and complement the aforementioned topics, will also be presented. Each participant will be provided with a set of transparency slides illustrating the major findings of these 12 cases. A comprehensive syllabus covering all the lectures will also be issued to each participant.

Comparative Pathobiology of Environmental Disasters

This two-day symposium will focus on the multidisciplinary approach necessary for investigation of natural and man-made disasters, to fully evaluate their potentially devastating effect on the ecosystem. Pathologists, epidemiologists, toxicologists, and other scientists will discuss specific environmental crises and the resulting pathology, as well as highlight research on various plant, invertebrate and vertebrate sentinels.

Perinatal and Pediatric Pathology

This course, primarily designed for general pathologists, pathology residents, neonatologists, pediatricians, obstetricians and other clinicians interested in perinatal and pediatric pathology, will familiarize the participants with some of the most frequent pathologic conditions seen in the pediatric age group. The course will offer an opportunity for the participants to discuss with pediatric pathologists specific problems encountered in the handling and diagnosis of pediatric material. This course will emphasize tumors, malformations, forensic pathology, and other diseases unique to childhood. Two glass slides study sets will be available for independent review during the week; General Pediatric Pathology - 144 slides, and Placental Pathology - 100 slides. A case presentation format will be used to demonstrate the utility of the pediatric autopsy; the slides for which will be available for study prior to the presentation.

Instructions for Filling Out Application Form for AFIP Courses

1. **Course Fee:** Checks for all courses are to be made payable to the American Registry of Pathology (ARP). To safeguard your course space, we strongly encourage advance fee payment when application form is submitted, but not later than the Application Priority Deadline (does not apply to non-U.S. citizens).
2. **Application Priority Deadline:** Fifty percent of the course spaces are reserved for federal applicants and 50% for non-federal applicants until the Application Priority Deadline Date. After that date, applications will be considered on a first-received, first-accepted basis.
3. **Federal Personnel Please Note:** To insure a space will be held for you, submit an application for each course you desire to attend directly to the Education Division, AFIP. Do this regardless of any funding action.
4. **Accreditation:** The Armed Forces Institute of Pathology is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.
5. **Registration Procedures for International Applicants:**

Civilians:

Mail letter of application to:

Chief, Program Resources Branch
E/VCP, Rm 266
United States Information Agency
301 4th Street, S. W.
Washington, D.C. 20547
FAX: (202) 619-4655

Letter of application should include:

1. Title of course
2. Inclusive dates of course
3. Your present position
4. Your home and office mailing address
5. Your date and place of birth
6. Your country of citizenship
7. Your financial arrangements for stay at this course (U.S. Government cannot be responsible for any expenses incurred while you are in the U.S.)

With letter of application, attach a copy of course application form, a check drawn on a U.S. bank or International Money Order, payable to the American Registry of Pathology, in U.S. dollars in the amount required.

Military:

Request the desired training through your military training channels to the Security Assistance Office of the U.S. Mission in your country.

International Applicants Employed by an Agency of the U.S. Government

Attach to letter of application (see above) a letter certifying employment from your servicing personnel office and mail to:

International Training Program Manager,
U.S. Army Health Professional Support Agency
Attn: SGPS-EDI; International Training Officer
5109 Leesburg Pike
Falls Church, VA 22041-3258
FAX: (703) 756-7535

Residents and fellows deduct 25% of Course Fee

Friends of AFIP deduct 10% of Course Fee

APPLICATION FORM - AFIP COURSES

Course Title & Dates _____

Name (Last, First, MI) _____

Mailing Address _____

City, State, Zip _____

Phone _____ Specialty _____ Board Status: Certified Eligible

Citizenship _____ Resident/Fellow Friend of AFIP Membership # _____

Military/Federal Civilian Employees (Only): Rank/Civilian Grade _____

Service Agency: _____

Corps: MC, DC, NC, VC, Biomedical/Allied Science

Payment Enclosed: (Payable in U.S. dollars only) Tuition \$ _____ DoD, VA, and PHS Fee \$ _____

Method of Payment: Check/Money Order MasterCard Visa

Card Number _____ Expiration Date _____

Name as it appears on card _____

Signature _____

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Recent Publications by AFIP Staff

1. Bronner WE, Xu AS. Gas chromatographic-mass spectrometric methods of analysis for detection of 11-nor- Δ^9 -tetrahydrocannabinol-9-carboxylic acid in biological matrices. *J Chromatogr.* 1992;580:63-75.
2. D'Nicuola J, Jones R, Levine B, Smith ML. Evaluation of six commercial amphetamine and methamphetamine immunoassays for cross-reactivity to phenylpropanolamine and ephedrine in urine. *J Anal Toxicol.* 1992;16:211-213.
3. Ho VB, Smirniotopoulos JG, Murphy FM, Rushing EJ. Radiologic-pathologic correlation: hemangioblastoma. *AJNR Am J Neuroradiol.* 1992;13:1343-1352.
4. Kikendall JW, Glass AR, Sobin LH, Bowen PF. Serum gastrin is not higher in subjects with c
neoplasia. *Am J Gastroenterol.* 1992;87:1394-1397.
5. Kransdorf MJ, Meis JM, Montgomery E. Elastofibroma: MR and CT appearance with radiologic-pathologic correlation. *AJR Am J Roentgenol.* 1992;159:575-579.
6. Malamou-Mitsi V, Tsai MM, Gal AA, Koss MN, O'Leary TJ. Lymphoid interstitial pneumonia not associated with HIV infection: role of Epstein-Barr virus. *Mod Pathol.* 1992;5:487-491.
7. Mostofi FK, Davis CJ Jr, Sesterhenn IA. Pathology of carcinoma of the prostate. *Cancer.* 1992;70:235-253.
8. Wu SC, Levine B, Goodin JC, Caplan YH, Smith ML. Analysis of spleen specimens for carbon monoxide. *J Anal Toxicol.* 1992;16:42-44.

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